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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,868	01/21/2004	Ann L. Engh	SCW0001-03	3140
832	7590	12/21/2005	EXAMINER	
BAKER & DANIELS LLP 111 E. WAYNE STREET SUITE 800 FORT WAYNE, IN 46802			BUSHEY, CHARLES S	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,868

Applicant(s)

ENGH ET AL.

Examiner

Scott Bushey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) 25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimes et al '786.

Grimes et al (Figs. 4-7) as applied above substantially disclose applicant's invention as recited by instant claims 11-17, except for the plate being substantially of rectangular shape, as recited by instant claim 11, and the specific dimensional characteristics set forth by instant claims 14-17. The reference does clearly disclose within the figures of the reference dimensions of the plate that closely approximate the rib and ligament dimensions as set forth by the instant claims. In view of the overall

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teaching of the reference, it would have been obvious to an artisan at the time of the invention, to modify the dimensional characteristics of the plate thickness and rib sizes, by way of routine experimentation, if it were desired to more tightly or loosely pack the plates together within a useable matrix, whereby such modifications would allow for improved contact between the phases within the assembled plate matrix, thus improving the efficiency of the device for the desired purpose of use.

With respect to the overall shape of the plate being rectangular rather than circular, it would have been obvious for an artisan at the time of the invention, to provide the contact plate in any convenient overall shape, since such would have been dictated by the specific environment and desired use of the contact plate. Note *In re Dailey et al*, 149 USPQ 47.

Response to Arguments

4. Applicant's arguments with respect to claims 11-13 have been considered but are moot in view of the new ground of rejection.

With respect to applicant's arguments that the Grimes et al '786 reference teaches away from rectangular shaped plates, since such would not, according to applicant, provide the optimal surface area of the circular plates of the reference, it should be noted that there are several ways in which contact surface area on a given plate may be optimized, including providing ribs thereon to promote mixing and turbulence within the contact area of the plates. Furthermore, applicant's instant specification is silent as to any alleged criticality of surface area of the claimed contact plates. According to the instant application, the ribs are utilized to provide a lightweight,

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yet strong plate, wherein increased air turbulence, improved liquid dwell time, and more uniform liquid distribution is realized relative to plates that do not have the claimed rib structure. As such, wherein Grimes et al '786 clearly discloses or suggests applicant's claimed rib structure for increasing contact efficiency between the phases, the specific overall shape of the claimed plate being rectangular, rather than circular, is not considered to patentably distinguish the instant invention from the prior art.

It is noted that applicant has not separately argued the patentability of instant claims 14-17.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Scott Bushey
Primary Examiner
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